

4. (Amended) A nickel base superalloy comprising 3.0 to 12 wt% chromium, up to 3.0 wt% molybdenum, 3.0 to 10 wt% tungsten, up to 5.0 wt% rhenium, 6.0 to 12 wt% tantalum, 4.0 to 7.0 wt% aluminum, up to 15 wt% cobalt, up to 0.05 wt% carbon, up to 0.02 wt% boron, up to 0.1 wt% zirconium, up to 0.8 wt% hafnium, up to 2.0 wt% niobium, up to 1.0 wt% vanadium, up to 0.7 wt% titanium, up to 10 wt% of at least one element selected from the group consisting of ruthenium, rhodium, palladium, osmium, iridium, platinum, and mixtures thereof, and the balance essentially nickel, said nickel base superalloy having a microstructure which is pore-free and eutectic $\gamma - \gamma'$ free, said microstructure having a gamma prime morphology which includes a bimodal γ' distribution, said bimodal γ' distribution including a uniform distribution of large γ' particles in a continuous gamma matrix and a second and uniform distribution of fine γ' particles, said large γ' particles being octet shaped and having an average particle size in the range of 1.0μ to 20μ and the fine γ' particles being cuboidal particles and having an average particle size in the range of from 0.45μ to 0.55μ .

a₂ 10. (Amended) A single crystal nickel base superalloy having a microstructure which is pore-free and eutectic $\gamma - \gamma'$ free and a

gamma prime morphology which includes a bimodal γ' distribution having large γ' particles with a particle size in the range of from 1.0μ to 20μ and fine γ' particles, said fine γ' particles having a particle size in the range of from 0.45μ to 0.55μ .

11. (Amended) A single crystal nickel base superalloy according to claim 7, wherein said large γ' particles have an octet shape and said fine γ' particles have a cuboidal shape.

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